CHAPTER VII—ANIMAL HUSBANDRY AND VETERINARY SERVICES.

(i) Animal Husbandry and Veterinary Services.

General

893. The policy of the Department mainly continued, as heretofore, to plan and organise the different animal husbandry activities of the State which may be classified under breeding, feeding, management and disease control.

Seasonal Conditions.

894. The seasonal conditions were satisfactory throughout the year. There was adequate supply of water and fodder to the cattle.

Contagious Diseases.

895. *Rinderpest.*—Thirty-one (1) outbreaks of rinderpest were encountered in Chickmagalur and Shimoga Districts and these were controlled by timely measures and 13,908 (618) animals were inoculated against the disease.

896. *Haemorrhagic Septicaemia.*—This disease was more widely prevalent in Dharwar, Coorg and Shimoga Districts. Totally 3,283 (2,829) villages were affected in which 10,19,581 (7,78,095) bovines and 5,420 (14,220) others were protected by inoculation.

897. *Anthrax.*—Kolar, Bangalore and Tumkur Districts reported heavy incidence of this disease affecting as many as 423 (560) villages. To control these, 1,01,574 (1,08,043) bovines and 21,395 (16,614) other animals were inoculated.

898. *Black Quarter.*—Three thousand, three hundred and forty (3,042) villages reported the incidence of this disease, Bangalore, Tumkur and Bijapur Districts reporting the largest number. To control these, 6,69,790 (6,77,814) bovines were inoculated.

899. *Sheep Pox.*—Two hundred and sixty-eight (595) villages were affected by this disease, the largest number coming from Mandya, Tumkur and Bangalore Districts. To control these, 98,450 (2,17,412) vaccinations were undertaken.

900. *Poultry Diseases.*—The prevalence of Ranikhet was reported from 971 (755) villages and Fowl Pox was reported from 36 (44) villages. To control their spread 8,67,742 (8,84,353) and 16,082 (12,562) birds, respectively, were protected against these diseases.

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Mortality.

901. The total number of deaths reported from several contagious diseases during the year was 22,303 (24,429) and the total number of deaths reported from non-contagious diseases such as accidents, local diseases, poisoning, depredations from wild animals, and protozoal diseases was 9,410 (12,053).

Veterinary Institutions.

902. At the close of the year, there were 434 (416) veterinary institutions including those under the control of the National Extension Service authorities comprising 26 hospitals, 151 stationary and 4 touring taluk dispensaries and 229 stationary and 24 touring rural dispensaries.

903. A total of 21,00,705 cases were handled in the veterinary institutions and a total of 26,88,379 cases were handled by the staff of the department by undertaking inoculations and vaccinations and also visits to the villages.

Veterinary Education and Training.

904. No fresh candidates were deputed to any of the veterinary colleges in India since the State's Veterinary College was established during the year at Hebbal, outskirts of the Bangalore City limits. However, to meet the additional requirements for implementing the several Second Five Year Plan schemes, the Department undertook the training of candidates in the Stockmen's Training School, Dharwar and Compounders' Training Centre, Bangalore. For specialised training two candidates were deputed to U.S.A. under T.C.M. Programme, two were deputed to Australia under the Colombo Plan and one candidate to France under the French Government scholarship.

905. During the year, 18 stipendiaries were undergoing training in the several veterinary colleges in the various States.

906. Two candidates were deputed for training at the National Dairy Research Institute, Bangalore.

907. During the year, seven departmental candidates were deputed for advanced training in Animal Husbandry and Veterinary Science at the Indian Veterinary Research Institute, Izatnagar, U.P.

Development Schemes

908. Under the Second Five Year Plan, several schemes were drawn up with the object of improving the livestock wealth of the State. The details of these were :—

(1) *Veterinary College.*—The long felt need of the State was fulfilled when the Veterinary College was opened during the year at the premises of the Mysore Serum Institute, Hebbal (outskirts of Bangalore City).

(2) *Key Village Scheme.*—Three key village centres were opened at Kollegal (Mysore District), Hospet (Bellary District) and Jamkhandi (Bijapur District), thereby bringing the total number to 15 centres including the one located at Bangalore and operated by the Government of India, at the close of the year.

(3) *Artificial Insemination.*—During the year, artificial insemination centres were opened at Udipi, Puttur and Karkal, all in South Kanara District, thus bringing the total number in the State to 61 centres and sub-centres apart from those located under the Key Village Scheme.

(4) *Sheep Development Schemes.*—In order to develop sheep and wool industry which occupies an important place in the rural economy of the State, three sheep and wool development centres with eight units each were opened at Kolar, Hospet and Bijapur.

(5) *Poultry Extension Centres.*—The six pilot poultry projects located at Kurikuppi, Gundlupet, Ponnampet, Kumta, Mangalore and Malavalli continued to show steady progress by supplying more hatching eggs to *bona fide* breeders in the neighbouring areas in addition to providing training facilities in poultry keeping. During the year, two more were opened at Bijapur and Kundapur.

(6) *Piggery Development Centres.*—With the object of developing the piggery wealth of the State two development centres were opened at Kolar and Coorg Districts in which boars of improved varieties were distributed to private breeders.

(7) *Calf Subsidy Scheme.*—With the object of allowing promising bull calves to come to age instead of being castrated, the owners of these calves are proposed to be encouraged through payment of subsidy. During the year, 42(34) were enlisted under this Scheme as against 200 sanctioned by the Government.

(8) *Livestock Improvement Scheme.*—This is the fourteenth year of operation of the scheme. During the year, 60(59) bulls were distributed free to the custodians.

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The total number of coverings done by the bulls including those distributed during the previous years was 15,092 (19,223).

(9) *Bangalore Milk Supply Scheme.*—The Co-operative Milk Union established from 1st January 1958, with the financial assistance of the Government of India, expanded its activities during the year. During the year, 31,88,101 lbs. of milk were collected of which 4,80,286 lbs. were from Government livestock farms, 8,22,152 lbs. from producers in the City and 18,85,663 lbs. from the villagers. These were sold to public and private institutions in and around the city including the hospitals maintained by the Government. The total expenditure was Rs. 8,06,236-16 as against a receipt of Rs. 8,46,691-83, resulting in a net profit of Rs. 40,455-67.

(10) *Hubli-Dharwar Milk Scheme.*—This is a continuing scheme. The milk produced in the several parts was collected, pasturised and distributed in the two cities. Daily, on an average, 1,030 seers of milk were handled during the year.

(11) *Milk-Supply Scheme, Kudige.*—The co-operative milk supply scheme functioning at Kudige, Coorg District, continued its operations with increased activities during the year.

(12) *Sheep Breeders' Associations.*—The nine sheep breeders' associations continued to work in the State during the year. There were 3,815(3,594) members at the end of the year. Ten (68) stud rams were distributed through these associations, 3,262(1,398) scrub rams were castrated and 26,771 (12,787) sheep were dosed against helminthic parasites among members flocks. The quantity of wool collected during the year was 16,155 (12,079) lbs. and out of this 1,155 (1,013) woollen fabrics were manufactured in the weaving sections attached to the associations.

Amritmahal Section.

909. The strength in the four economic cattle farms, namely, Habbanaghatta farm, Birur farm, Kynodu farm, and Ulavarthy farm at the close of the year was 1,917(1,792). During the year, the seasonal conditions were not satisfactory. As a result of this, fodder scarcity was felt in all the economic cattle farms except the one located at Habbanaghatta.

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910. The total receipts and expenditure of the section for the year were Rs. 61,762-39 (Rs. 51,949-79) and Rs. 54,147-42 (Rs. 56,453-86), respectively.

911. *Aided Cattle Breeders' Scheme.*—The scheme was implemented 23 years ago to encourage private breeders of Amrithmahal cattle. There were 14 (14) private breeders with a stock of 2,518 (2,207) animals at the close of the year.

Cattle Breeding Station, Ajjampur.

912. There were 1,139 (1,149) heads of cattle in this farm at the close of the year. Forty-five (59) bulls were supplied during the year for breeding purposes. The yield of milk was 24,978 (36,324) lbs. The total receipts and expenditure were Rs. 67,068-87 (Rs. 64,982-52) and Rs. 82,895-5 (Rs. 81,607-78), respectively.

Government Stud Farm, Kunigal.

913. *Government Animals.*—There were 6 (9) stallions, 15 (13) mares and 5 (2) young stock at the close of the year.

914. *Eve Blood Scheme Animals.*—There were 1 (4) mares and 2 (3) young stock at the close of the year.

915. *Private Owned Animals.*—There were 16 (3) mares and 9 (6) young stock at the close of the year.

916. *Sheep Breeding.*—There were 142 (197) Bannur breed of sheep at the close of the year in the farm.

917. The total receipts and expenditure of the farm during the year were Rs. 79,381-51 (Rs. 89,558-31) and Rs. 1,62,564-57 (Rs. 1,23,161-61), respectively.

Combined Sheep and Cattle Farm, Kurikuppi.

918. There were 163 (388) heads of Hallikar cattle and 88(38) Murrah buffaloes, 142 (331) sheep and 245 (63) poultry birds in the combined sheep and cattle farm, Kurikuppi at the end of the year.

919. The receipts and expenditure of the farm during the year were Rs. 35,045 (Rs. 14,105-66) and Rs. 1,74,758 (Rs. 1,22,942-01), respectively.

Cattle Fairs.

920. Owing to the favourable seasonal conditions which prevailed during the year, 199 (183) cattle fairs were held and arrangements were made to open temporary dispensaries for providing veterinary aid to the cattle which gathered in these.

921. In order to provide incentive to the cattle breeders to rear better stocks, prizes worth Rs. 30,562 (Rs. 30,300) were distributed to the best exhibits.

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Gosamvardhana Celebrations.

922. With a view to providing interest among the private breeders to rear good livestock, Gosamvardhana week was celebrated throughout the State during the months of November and December in the year. Educative propaganda was also organised as an adjunct to these by providing exhibits, charts, photos and speeches from different persons.

(ii) Mysore Serum Institute, Bangalore.

923. The Institute continued to manufacture and supply on a commercial scale the required biological products for the control of epizootological diseases in the state and for supply to the several places outside the state.

924. During the year, 63 post-mortems were conducted on sheep and goats while 92 blood and tissue specimens and 426 faecat samples were examined. Trypanosomiesis and Dieldvi poisioning were recorded in the state for the first time.

925. The nine centres established for controlling liver flukes with the financial assistance of the Government of India continued during the year. A total of 1,30,441 animals were dosed besides castrating 2,568 animals and treating 716 for non-contagious diseases.

926. As regards the stock of biological products the year commenced with an opening balance of 2,60,639 (1,62,300) doses, 21,150 (12,300) c.c. and 134 (800) bottles of all biologicals. During the year, 40,72,610 (42,74,790) doses, 2,10,970 (1,24,370) c.c. and 6,631 (10,116) bottles were prepared. Out of these, 42,08,599 (41,14,765) doses, 2,03,925 (1,15,520) c.c. and 6,648 (10,782) bottles were used.

927. The following was the list of biological products prepared and issued from the Institute. 1. H. S. Vaccine, 2. H. S. Serum, 3. B. Q. Vaccine, 4. B. Q. Serum, 5. Anthrax Serum, 6. Anthrax Saporium Vaccine, 7. Ranikhet Disease Vaccine, 8. Sheep Pox Vaccine, 9. Fowl Pox Vaccine, 10. Goat Pox Vaccine, 11. R.P.Serum, 12. R.P.Goat Virus, 13. Anti Rabic Vaccine, 14. Normal Saline, 15. Distilled water.

928. The total receipts and expenditure of the Institute during the year were Rs. 5,61,342-34

(Rs. 4,92,876-46) and Rs. 2,62,099-40 (Rs. 2,36,063-34), respectively, resulting in a net increase of Rs. 1,99,242-94 (Rs. 2,56,813-12).

(iii) (a) Composite Live-stock Farm and Research Station, Hessarghatta, Bangalore.

929. There were 70 (88) cows, 7 (5) she buffaloes, under cattle breeding; 2 (2) bucks, 23 (24) does, 14 (16) doe kids, 13 (19) buck kids under goat breeding; 4(4) rams 136 (127) ewes and 166 (128) lambs under sheep breeding Mutton (Bannur) type; 3(3) ram, 78(69) ewes and 131 (105) lambs under woolly (Hassan) type; 419 (374) animals under Hallikar Cattle breeding at the end of the year.

930. *Dairy Farm*:—There were 350 (319) sindhi cows, 22 (18) cross breed stock and 89 (88) murrah buffaloes at the close of the year in the farm. The total expenditure of this farm was Rs. 67,736-49 (Rs. 1,68,611-26) and the receipts were Rs. 62,762-26 (Rs. 65,137-34). The total quantity of milk yielded by the cows was 1,90,519 (1,88,429) lbs. and by the she-buffaloes 42,202 (42,106) lbs. In addition, 2,283 (3,12,014) lbs. of colostrum from cows and 260 (705) lbs. of buffaloe colostrum was also realised. The whole milk was as in earlier years supplied to the hospitals in Bangalore City.

(b) Government Central Poultry Farm, Hessarghatta, Bangalore

931. This is the eigth year of establishment of a 1000 layer farm. There were 9,426 (10,465) birds at the close of the year. On an average 1,314 (1,128) layers were maintained on the farm throughout the year which produced 138,052 (1,50,622) eggs made up of 47,684 (59,559) fertile, 85,785 (86,712) infertile and the remaining 4,583 (4,351) broken or discarded eggs. The eggs set for incubation were 35,352 (34,289) and 19,710 (18,845) chicks were produced out of these. Eight thousand, five hundred and seventy-five (5,436) birds were sold for breeding purposes in addition to supply of 1,520 (1,109) cockerels given in exchange for country cockerels in the areas covered by the Key Village and N. E. S. blocks, and 11,419 (25,252)

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hatching eggs were sold to the public for hatching both within and outside the state.

932. The total receipts and expenditure of the farm during the year were Rs. 65,775-33 (Rs. 1,12,500-09) and Rs. 94,701-29 (Rs. 90,816), respectively.

Conclusion

933. As could be seen from the work turned out in the several sections including the veterinary institutions, the period was marked by an all round increase in the activities of the department under all aspects of livestock development.

934. Animal husbandry practices vary vastly in the five integrated Karnatak areas. In order to introduce uniformity, emphasis was being laid to provide veterinary aid on a greater scale in the areas transferred from the erstwhile Hyderabad and Madras States, while in the rest greater attention was bestowed for development in breeding of improved livestock.

(iv) Fisheries

General

935. The year 1958-59 was characterised by substantial progress in the schemes for the development of fisheries in the State. Mechanisation of fishing was pushed forward with a busy construction programme for the Boat Building Yard set up at Mangalore. A training centre for fishermen was started during the year at Mangalore for training fishermen in fishing from mechanised boats. Construction work on the Ice Plant-*cum*-Cold Storage at Karwar was taken up. Three transport trucks were made available to Fishermen's Co-operatives for quick transport of fresh fish from the coast to inland markets. Many Fishermen's Co-operative Societies availed themselves of financial assistance provided by Government in the form of long-term loans, contribution to their share capital and grants towards managerial expenses. Three schools for fisher children were upgraded into High Schools in South Kanara District.

Technical Assistance.

936. Under the Expanded Technical Assistance Programme of the Food and Agricultural Organisation, six F.A.O. experts were on assignment in the State during the year.

Fishing season.

937. The fishing season was good during the year in North Kanara District but in South Kanara it was rather

poor compared with the record catches of the previous year.

938. *Fish Landings.*—A total of about 1,00,000 tons of fish was estimated to have been landed on the Mysore coast during the year.

939. The mackerel is the most important commercial fish on the Mysore coast. As in the previous year, it constituted the bulk of the fishery, constituting nearly 35 per cent of the catch. The other catches were oil sardine, cat fish, prawns, sharks, seer, ghol and soles.

940. Compared with some other maritime states in India, fishing from power boats may be said to have been introduced in Mysore State only very recently. A scheme for the construction and distribution of mechanised boats included in the State's Second Five Year Plan was continued during the year. Mechanised Fishing.

941. *T.C.M. Dan Boat.*—The T.C.M. Dan Boat continued to operate off Mangalore on 14 per cent share system.

942. *Pablo Type Boats.*—There were 25 Pablo boats operating at the end of the year in the State.

943. *Training Boat.*—A 31' 9" transom stern "Pablo" type boat which was constructed at Cochin by Messrs. Brunton & Co., was used as a training boat for the Fishermen's Training Centre at Mangalore.

944. *Motorisation of Indigenous Boats.*—Under the guidance of F.A.O. Naval Architect, a 3·5 H.P. air-cooled engine in a dug-out conoe was installed at the close of the year. The boat was used for long line fishing.

945. *Assignment of F.A.O. Fishery Engineer.*—The F.A.O. Engineer Mr. G. S. Illugason was working in the State at Mangalore at the beginning of the year with two F.A.O. Steel Dories and two Danish boats. At Karwar he conducted demonstration of Trawl fishing and Gill Net fishing from these boats.

946. A total quantity of 56,000 lbs. of fish was landed during the year from the operations of the four F.A.O. boats under the guidance of Mr. Illugason. The most remarkable catch was that of a whale shark of about 40 feet in length and estimated to weigh 20 tons. The shark was encountered about six miles off Mangalore in five fathoms of water.

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Fish Processing and Preservation.

947. Fish being an easily perishable commodity, the department's activities were directed not merely towards increasing the production but also to the provision of increased and improved facilities for preserving the catch in order that what is caught is properly utilised to the maximum possible extent. The work in this field consisted of the maintenance of Government fish curing yards along the coast and the setting up and working of ice and cold storage plants.

948. There were 30 fish curing yards in the State during the year. A quantity of 96,787 maunds of salt was issued to the Fishermen's Co-operative Societies for curing 5,10,914 maunds of fish.

949. The Master Curer stationed at Karwar toured various fish curing yards in the North Kanara District and demonstrated improved methods of fish curing. The fishermen and fish curers took advantage of such demonstrations.

950. *Government Ice Factory and Quick-freezing Plant.*—The Ice Plant and Cold Storage at Mangalore continued to provide ice for preservation of fish, facilities for short-term preservation of fish in the chill room as well as for deep freezing and cold storage of frozen fish.

951. Apart from this, the facilities provided at the Plant excluded the export of increased quantities of frozen foods to countries like the U.S.A. which earned much coveted foreign exchange for the country. During the year, it was estimated that this plant alone had earned dollars to the tune of about 10 lakhs of rupees.

Fish Bye-products.

952. Shark liver oil, sardine oil, fish guano and fish manure were the main bye-products produced from marine fisheries of the State.

953. *Shark Liver Oil Production.*—As in the previous years, the supply of shark livers and neat shark liver oil from eight centres of South Kanara District to the Government Oil Factory, Kozhikode, Kerala, was continued. A total quantity of 26,982 (31,490) lbs. of shark livers was collected during the year, of this 14,410 lbs. of raw shark livers and 4,176 lbs. of shark liver oil extracted from the remaining quantity of livers were despatched to the Kerala Government Oil Factory.

954. *Beach dried Fish Manure.*—During the year, only 70 tons of beach dried manure was prepared as against 590 tons prepared in the previous year.

955. *State Fisheries Research Station.*—The State Fisheries Research Station, Hospet, on the Tungabhadra River was continued during the year.

956. *Central Fisheries Research Stations*—The Government of India have set up a Lacustrine Fisheries Research Unit at Tungabhadra Reservoir which is the second largest reservoir in India, in view of the numerous large lakes and reservoirs existing in the State. Research

957. The Government of India have established also two of their Marine Fisheries Research Units at Karwar and Mangalore. The Karwar Unit was carrying out investigations on the mackerel while the Mangalore Unit was engaged in studies on mackerel, sardines and prawns.

958. The numerous inland waters in the State including the important rivers which pass through it, present vast potentialities for fisheries development. Inland Fisheries.

959. Following Reorganisation, a number of new schemes have been commenced to be implemented under the Second Five Year Plan. Under one of these schemes, the entire State is being covered progressively by opening Fisheries Development Divisions which would attend to the work of surveying waters, organising seed collection and stocking, establishing and maintaining fish farms and developing and exploiting the fisheries. Under another scheme, fry of the gangetic carps are obtained and distributed. Fish nurseries are being constructed at suitable places for rearing the fry before stocking.

960. During the year, 7,23,470 (9,56,507) fry and fingerlings of various locally available varieties were collected for stocking and rearing.

961. Sanction was accorded for importing 14 lakhs of fry of the Gangetic Carps—Catla, Rohu, Mrigal, etc., from Calcutta at a cost of Rs. 34,225 for stocking in various inland waters of the State.

962. About 14,160 (10,653) fingerlings of suitable varieties were supplied during the year to private fish farmers and C. D. Blocks.

963. Fourteen fish farms and ponds were maintained during the year in the various districts. Besides rearing carp fry in the farms, 39,941 (20,000) lbs. of fish were produced and supplied to consumers realising Rs. 13,684-28 (Rs. 9,063-14).

964. A total number of 5,517 (2,952) fishing licenses were issued and a revenue of Rs. 35,871 (Rs. 19,362) was realised during the year.

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965. The fisheries of 413 tanks having, approximately, 16,52,477 acres of water spread area, were sold in public auction fetching a revenue of Rs. 27,371-16.

Schemes under Second Five-Year Plan.

966. Thirty-one schemes were in operation during the year as against twenty in the previous year. One scheme *viz.*, Scheme No. 205 "Co-operative Fisheries" was transferred from the Co-operation Department to Fisheries Department. Excepting two schemes, *viz.*, the Scheme for the establishment of a Fisheries Research Station in the State and the Scheme for the establishment of Fish Meal Plant, all the others were under execution during the year.

Finance

967. The total expenditure of the Department during the year was Rs. 12,99,071 and the receipts were Rs. 5,02,876 (including subventions from the Government of India) as against an expenditure of Rs. 11,20,281 and revenue of Rs. 2,81,602 in the previous year.

Conclusion

968. The notable event during the year was the States Fisheries Ministers' Conference on Inland Fisheries held in Mysore from 14th July to 16th July 1958.

969. A scheme for the development of the fisheries of the Tungabhadra Reservoir was drawn up jointly by the Directors of Fisheries of Mysore and Andhra Pradesh States' and the Chief Research Officer, Central Inland Fisheries Research Station, Calcutta. The scheme was sanctioned by the Tungabhadra Board and was ready for implementation by the close of the year.

970. Special schools were opened on the coast by the Fisheries Department for the education of the fisher children. Instruction in these schools has a distinct fishery bias and in addition to the usual subjects, fish biology, fisheries technology, net making, coir work and carpentry are taught.

971. There were 27 fisheries schools functioning during the year in the two Kanara districts with a student strength of 5,015 at the end of the year.

972. The economical, educational and social development of the fisher folk forms an important part of the activities of this Department as successful development of fisheries is greatly handicapped by the backwardness of the fishermen. In this field, the work of this Department has proceeded along several lines, chief of which are the promotion of co-operative effort among fishermen, grant of financial assistance, education, inculcation of thrift and rehabilitation work.